

Case Study

East Meon River Restoration

Background

The River Meon was surveyed in 2009 by Dr N.Holmes to assess its habitat quality and to identify opportunities for the enhancement of river sections. The report was commissioned by the Meon Valley Partnership (MVP). The partnership, made up of a variety of partners and stakeholders, provides a co-ordinated and strategic approach to conserving and enhancing the Meon Valley from 'source to sea'.

One of the most highly visible sections of the river, and arguably the most modified, was identified in East Meon right in the centre of the village.

The South Downs National Park Authority (SDNPA) working with the MVP, specifically the Environment Agency and the Wild Trout Trust, undertook a piece of research, to learn from similar projects already been conducted in the UK, where similar limitations such as flood risk, impermeable concrete, extreme water levels, and the proximity to a residential population were identified as key factors. Methodologies and options to enhance the river were discussed and reviewed in order to find a suitable solution for the East Meon project.



Before restoration 'a shallow skim of water'



After restoration 'a semi-meandering naturalised channel'

“The hard work has paid off; we now have a healthier and more attractive river, as fitting our beautiful village.”

Nigel Brooks, Local resident

The outcome

The first phase of the river enhancement project has now been completed in a forty metre section of channel running upstream from the bridge in Bridge Street. The project took about two years in planning and 4 days to physically complete.

The project has been funded and supported by; the SDNPA through the Grassroots fund (£4,500) and the time and expertise of members of the Western Area Team; the Wild Trout Trust through the Pascoe James fund (£2,000); the South Downs Volunteer Ranger Service (SDVRS); and the Parish Council.

It is designed to create a semi-natural meandering channel within the confines of the existing concrete lined channel. The work has created an environment that will enable chalk stream invertebrates and plants to thrive and provide a more favorable environment for fish such as small brown trout and bullheads, as well as providing an ideal feeding area for grey wagtails and egrets. We also believe that the channel will be more aesthetically pleasing than the previous shallow skim of water passing over a flat concrete bed.

The work involved bonding over 400 stones to the concrete bed with short steel pegs drilled into the stones and the concrete to form the low flow channel. The pockets, or berms, created by the stones were then filled by hand with 18 tonnes of river gravels and planted.

All of the work was carried out by hand by two conservation officers from the Wild Trout Trust, supported by an able team from the SDVRS. Local resident and river Meon champion Nigel Brooks was instrumental in helping the project to get off the ground as well as physically rolling up his sleeves and helping with the project delivery.

There is now an opportunity to see how the channel will settle down and respond to flood flows, which are always a concern to those who live by the river. The project has been carefully modelled and designed to ensure that there is no increased flood risks associated with the work.

We are all hoping for an “average” summer and winter before evaluating whether or not to extend the scope of the project to the remaining sections of the untreated channel.

The future

The River Meon in East Meon village is now a better home for plants, fish, birds, and invertebrates thanks to a project to improve its flow through promoting a ‘naturalised’ channel. The landscape and village setting have also been improved.

This initial section has held up well after peak winter flows in 2015 and plans are now being made, led by the MVP, to address the other river sections over the next few years.

Community involvement and promotion of the project has been essential, particularly as minds have been focused on flooding in the last two years. Now that a successful methodology has been found it is hoped that the community, especially children from the local school, can be actively involved in the next phases.

The approach adopted here has the potential to be applied in many locations, locally and nationally, where rivers and streams have been heavily modified, thereby providing a strong legacy that represents excellent value for money.

The data gathered is being used as a primer for Environment Agency funding to complete the other sections and the project has also been added to the CiL Infrastructure Delivery Plan for consideration.

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